

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

COMBINED DECLARATION AND POWER OF ATTORNEY

FOR JOINT INVENTORS

As the below named coinventors, we hereby declare that:

Our residences, post office addresses and citizenships are as stated below next to our names. We believe we are the original, first and joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled as follows: HUMAN SUPPRESSOR tRNA OLIGONUCLEOTIDES AND METHODS OF USE FOR SAME, the specification and drawings of which are attached hereto.

We hereby state that we have reviewed and understand the contents of the above identified specification and drawings, including the claims, as amended by any amendment referred to above.

We acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code Of Federal Regulations, Section 1.56. We further declare that no application for patent or inventor's certificate on this invention has been filed by us, our legal representatives or assigns in any country foreign to the United States of America except as identified below:

NONE.

We hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, § 112.

We acknowledge the duty to disclose information that is material to the examination of this application, namely, information where there is substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue as a patent, which

occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application.

PRIOR U.S. APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS  
DESIGNATING THE U.S. FOR BENEFIT  
UNDER 35 U.S.C. § 120:

Appln. No.	Filing Date	Patented	Pending	Abandoned
60/071,416	01/14/98		X	

PCT APPLNS. DESIGNATING THE U.S.

PCT Appln. No.	PCT Filing Date	U.S. Serial N Assigned (if any)	Patente	Pending	Abandoned

And we hereby appoint ZARLEY, MCKEE, THOMTE, VOORHEES & SEASE, comprising Donald H. Zarley, Registration No. 18,543; Bruce W. McKee, Registration No. 19,651; Dennis L. Thomte, Registration No. 22,497; Michael G. Voorhees, Registration No. 25,715; Edmund J. Sease, Registration No. 24,741; Mark D. Hansing, Registration No. 30,643; Kirk M. Hartung, Registration No. 31,021; Daniel J. Cosgrove, Registration No. 36,770; Michael R. Crabb, Registration No. 37,298; Heidi S. Nebel, Registration No. 37,719; Wendy K. Hartung, Registration No. 39,705; Jeffrey D. Harty, Registration No. 40,639; James A. Napier, Registration No. 42,025; and Mark Ziegelbein, Registration No. 43,307; 801 Grand Avenue, Suite 3200, Des Moines, Iowa 50309, Telephone 515-288-3667, our attorneys to prosecute this application and to transact all business in the Patent Office connected therewith.

We hereby declare that all statements made herein are of our own knowledge are true and that all statements made on information and belief are believed to be true; and further

that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

100007-1234567890

SIGNATURES

Inventor's signature:

Rekha Panchal

Date:

1/13/99

Full name of joint inventor: Rekha G. Panchal

Residence: Des Moines, Iowa

Post Office Address: c/o

Human Gene Therapy Research Inst.  
Iowa Methodist Medical Center  
1415 Woodland Street  
Des Moines, Iowa 50309

Country of Citizenship: India

Inventor's signature:

Charles J. Link

Date:

1/13/99

Full name of joint inventor: Charles J. Link, Jr.

Residence: Des Moines, Iowa

Post Office Address: c/o

Human Gene Therapy Research Inst.  
Iowa Methodist Medical Center  
1415 Woodland Street  
Des Moines, Iowa 50309

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
COMBINED DECLARATION AND POWER OF ATTORNEY  
FOR JOINT INVENTORS

As the below named coinventors we hereby declare that:

Our residence, post office addresses and citizenship are as stated below next to our names. We believe we are the original, first and joint inventors, of the subject matter which is claimed and for which a patent is sought on the invention entitled as follows:

**HUMAN SUPPRESSOR RNA OLIGONUCLEOTIDES AND METHODS OF USE FOR SAME,** the specification of which are attached hereto.

We hereby state that we have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

We acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code Of Federal Regulations, Section 1.56. We further declare that no application for patent or inventor's certificate on this invention has been filed by us, our legal representative or assigns in any country foreign to the United States of America, except as identified below:

NONE

We hereby claim benefit under title 35, United States Code § 119(e) of any provisional application(s) listed below:

60/071,416  
(Application Number)

01/14/98  
(Filing Date)

(Application Number)

(Filing Date)

We hereby appoint the attorneys of record listed under Customer No. 22885 at ZARLEY, MCKEE, THOMTE, VOORHEES & SEASE, 801 Grand Avenue, Suite 3200, Des Moines, Iowa 50309 (telephone number 515-288-3667 and fax number 515-288-1336), as our attorneys to prosecute this application and to transact all business in the Patent Office connected therewith.

Please direct all correspondence to the attention of Heidi S. Nebel, Zarley, McKee, Thornt, Vorhees & Sease, 801 Grand Avenue, Suite 3200, Des Moines, Iowa, 50309-2722 (telephone number 515-288-3887).

We hereby declare that all statements made herein are of our own knowledge, are true; and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and like so made are punishable by fine or imprisonment, or both, under Section 1001.

of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

**SIGNATURES**

Inventor's signature: RP Panchal

Date: 1/30/01

Full name of joint inventor: Rakha G. Panchal

Residence: Des Moines, Iowa

Post Office Address: c/o Human Gene Therapy Research Inst.  
Iowa Methodist Medical Center  
1415 Woodland Avenue  
Des Moines, Iowa 50309

Country of Citizenship: ~~India~~ United States of America

RP Panchal  
3/30/01

Inventor's signature: CL

Date: 1/30/01

Full name of joint inventor: Charles J. Link, Jr.

Residence: Des Moines, Iowa

Post Office Address: c/o Human Gene Therapy Research Inst.  
Iowa Methodist Medical Center  
1415 Woodland Avenue  
Des Moines, Iowa 50309

Country of Citizenship: United States Of America

## A S S I G N M E N T - W O R L D W I D E

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor has sold and assigned, and by these presents hereby sells and assigns, unto:

Human Gene Therapy Research Institute  
Iowa Methodist Medical Center  
1415 Woodland Avenue  
Des Moines, Iowa 50309

its successors and assigns, the entire right, title and interest so far as concerns the United States and the Territories and Possessions thereof and all foreign countries in and to the invention entitled HUMAN SUPPRESSOR tRNA OLIGONUCLEOTIDES AND METHODS OF USE FOR SAME as set forth in his United States Patent

Application

executed concurrently herewith

executed on \_\_\_\_\_

X      Serial No. 09/229, 212      filed 01/13/99

said application for United States Letters Patent, including all divisional, renewal, substitute, continuation and Convention applications based in whole or in part upon said inventions or upon said applications, and any and all Letters Patent and reissues and extensions of Letters Patent granted for said inventions or upon said applications and every priority right that is or may be predicated upon or arise from said inventions, said applications, and said Letters Patent; said Assignee being hereby authorized to file patent applications in any or all countries on any or all said inventions in the name of the undersigned or in the name of said Assignee or otherwise as Assignee may deem advisable, under the International Convention or otherwise; the Commissioner of Patents and Trademarks of the United States of America being hereby authorized to issue or transfer all said Letters Patent to said Assignee in accordance herewith; this assignment being under covenant, not only that full power to make the same is had by

the undersigned, but also that such assigned right is not encumbered by any grant, license, or other right theretofore given, and that the undersigned will do all acts reasonably serving to ensure that the said inventions, patent applications and Letters Patent shall be held and enjoyed by said Assignee as fully and entirely as the same could have been held and enjoyed by the undersigned if this assignment had not been made, and particularly to execute and deliver to said Assignee all lawful documents including petitions, specifications, oaths, assignments, invention disclaimers, and lawful affidavits in form and substance which may be requested by said Assignee, to furnish said Assignee with all facts relating to said inventions or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may be of said invention, and to testify in any proceedings relating to said inventions, patent applications, Letters Patent.

The undersigned hereby grant an authorized representative of Assignee the power to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

#### NAMES AND SIGNATURES OF INVENTORS

Name: REKHA G. PANCHAL	Signature: <i>Rekha G. Panchal</i>	Date: 1/13/99
Name: CHARLES J. LINK, JR.	Signature: <i>Charles J. Link, Jr.</i>	Date: 1/13/99
Name:	Signature:	Date:

#### NAMES AND SIGNATURES OF WITNESSES

Name: <i>Porraine Wilson</i>	Signature: <i>Porraine Wilson</i>	Date: 1/13/99
Name:	Signature:	Date:
Name:	Signature:	Date:

Note: Prima facie evidence of execution may optionally be obtained by execution of this document before a U.S. Consul or before a local officer authorized to administer oaths whose authority is proved by a certificate from a U.S. Consul.